Environmental Management Consolidated Business Center (EMCBC)

Subject: Oversight and Assessment Program Procedure

Polices, Procedures and Plans

APPROVED: **(Signature on File)**
EMCBC Director
ISSUED BY: Office of Logistics Management

1.0 PURPOSE

This procedure describes the roles, responsibilities, and basic processes to be used for implementing the Environmental Management Consolidated Business Center (EMCBC) /Service Level Agreement (SLA) Oversight and Assessment Program. The objectives of this program are to ensure effective, efficient EMCBC/SLA programs and operations through application of comprehensive and integrated assessment activities. This procedure specifies a uniform method for planning, scheduling, conducting, and reporting oversight processes, such as document reviews, surveillances, audits and assessments. This procedure has been written in a manner that will allow for those sites that are serviced by the EMCBC (i.e., those sites with a SLA) to also adopt this procedure. This procedure includes the following assessment elements (see Section 8.0, Procedure):

(1) Annual Assessment Plan
(2) Integrated Assessment Schedule
(3) Conduct of Assessments
(4) Reporting Assessment Results
(5) Requirements for Deficiencies
(6) Tracking Assessment Results to Closure
(7) Corrective Action Plans
(8) Operational Awareness Activities
(9) Document Reviews
(10) Performance Indicators and Trending
(11) Feedback and Improvement of the Assessment Program

Nothing in the issuance of this document changes any requirements contained in any Department of Energy (DOE) Directive. In the event there is a conflict between this procedure and a DOE Directive, the DOE Directive takes precedence.

2.0 SCOPE

This Procedure describes the processes used by the EMCBC and participating SLA sites to plan, schedule, perform, document, and distribute an assessment.

3.0 APPLICABILITY

The requirements contained within this document apply to all EMCBC and participating SLA site Federal or support contractor personnel.

4.0 REQUIREMENTS & REFERENCES

4.1 Requirements

4.1.1 PL-226-01, EMCBC Oversight Plan
4.1.2 PL-414-01, EMCBC Quality Assurance Program
4.1.3 PL-442-01, EMCBC Federal Employee Occupational Safety and Health Program (FEOSH)

4.2 References

4.2.1 DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*
4.2.2 DOE O 414.1C, *Quality Assurance*
4.2.3 DOE O 425.1C, *Startup and Restart of Nuclear Facilities*
4.2.4 DOE O 440.1B, *Worker Protection Program for DOE Federal Employees*
4.2.5 DOE-STD-1063-2006, *Facility Representatives*
4.2.6 DOE-STD-3006-2000, *Planning and Conduct of Operational Readiness Reviews (ORR)*
4.2.7 ASME NQA-1-2004, *Quality Assurance Requirements for Nuclear Facility Applications*
4.2.8 IP-230-01, Operating Experience/Lessons Learned Procedure
4.2.9 IP-243-03, Identifying, Filing, and Maintaining Records
4.2.10 IP-361-01, Training and Qualification for Federal Employees
4.2.11 IP-425-01, EMCBC Support for Startup and Restart of Nuclear Facilities Procedure
4.2.12 PD-361-02, EMCBC Facility Representative Program
4.2.13 PD-411-01, EMCBC FRAM
4.2.14 PD-414-03, EMCBC Pegasus Users Guide

5.0 DEFINITIONS & ACRONYMS – see Attachment J

6.0 RESPONSIBILITIES

6.1 EMCBC or SLA Site Senior DOE Official

6.1.1 Ensures that appropriate processes are in place to oversee effective execution of mission activities and implementation of the EMCBC/SLA Assessment Program.

6.1.2 Ensures that line management develops effective, documented programs for conducting oversight assessments of their contractor programs.

6.1.3 Designates the Manager for the EMCBC/SLA Assessment Program.

6.2 EMCBC or SLA Site Assessment Manager

Annual Assessment Plan (see Section 8.1)

6.2.1 Approves the charter for the Assessment Working Group to assist in the development of the *Annual Assessment Plan*.

6.2.2 Ensures that management assessments of EMCBC/SLA activities are conducted.

6.2.3 Requests independent assessments of EMCBC/SLA and contractor activities to be conducted, as necessary, and ensures they are included in the *Annual Assessment Plan*.

6.2.4 Approves and issues the *Annual Assessment Plan* prior to the start of the fiscal year and updates, as required.

Integrated Assessment Schedule (see Section 8.2)

6.2.5 Approves and issues the EMCBC/SLA *Integrated Assessment Schedule* (IAS) prior to the start of each fiscal year (FY) and any changes, in quarterly updates, as required.

Corrective Action Plans (see Section 8.7)

6.2.6 For EMCBC/SLA site assessments requested by the EMCBC/SLA Senior DOE Official, ensures the development of corrective action plans (CAPs) consistent with Departmental expectations and this procedure.

6.2.7 Controls and approves changes to CAPs and individual action due dates where approval authority resides with the EMCBC or SLA site.

6.2.8 Approves the CAPs within 60 calendar days of issuance of the final report.

6.2.9 For CAPs that require Headquarters (HQ) approval, submits the CAPs to the appropriate DOE HQ offices for approval or approves the CAPs if approval has been delegated to the site.

6.3 EMCBC or SLA Site Assessment Coordinator

Assessment Program (see Section 8.0)

6.3.1 Manages the EMCBC/SLA Assessment Program for the EMCBC/SLA Assessment Manager by leading/coordinating the development of the *Annual Assessment Plan* and the IAS, administering the EMCBC Pegasus Issues/Action Management System (Pegasus System) (see PD-414-03, EMCBC Pegasus Users Guide) or applicable site action tracking system, and performing analysis of EMCBC/SLA sites assessment information.

6.3.2 Provides an EMCBC/SLA system and tools for planning, scheduling, conducting, documenting, and tracking EMCBC/SLA oversight, assessments, walkthroughs, and corrective actions.

Annual Assessment Plan (see Section 8.1)

6.3.3 Assigns an organizational representative who leads the EMCBC/SLA effort to develop the *Annual Assessment Plan* and who also serves as the Assessment Working Group Chair.

6.3.4 Provides the template for the *Annual Assessment Plan* to the Assessment Working Group.

6.3.5 Ensures that the final updated *Annual Assessment Plan* is consolidated and provided to the EMCBC/SLA Assessment Manager for approval.

Integrated Assessment Schedule (see Section 8.2)

6.3.6 Ensures the IAS is consolidated from the *Annual Assessment Plan* and provided to the EMCBC/SLA Assessment Manager for approval.

6.3.7 Reports on progress and changes to the approved IAS.

Conduct of Assessments (see Section 8.3)

6.3.8 Supports the EMCBC/SLA Assessment Manager and the line organizations in conducting assessments and walkthroughs, as requested.

6.3.9 Manages the execution of oversight program assessments (e.g., quality assurance, integrated safety management, integrated safeguards & security management, cyber security, and emergency management) of EMCBC/SLA site contractors and of EMCBC/SLA line and support organizations, as requested.

Corrective Action Plans (see Section 8.7)

6.3.10 Prepares a monthly report for EMCBC/SLA senior management on the status of corrective actions.

Feedback and Improvement of the Assessment Program (see Section 8.11)

6.3.11 Conducts performance analysis activities in order to provide feedback to the EMCBC/SLA Assessment Manager and the line organizations for tracking and trending environment, safety and health (ES&H) and quality issues, occurrences, and corrective actions associated with deficiencies identified in internal and external assessments of EMCBC/SLA site activities.

6.3.12 Coordinates the EMCBC/SLA Lessons Learned and Operating Experience Program activities for EMCBC/SLA sites.

6.4 Organization-Specific Responsibilities

Each organization has responsibility for their particular assessments.

Annual Assessment Plan (see Section 8.1)

6.4.1 Assign an organizational representative to participate on the Assessment Working Group. The representative should be empowered to speak for their organization.

6.4.2 Ensure that an organizational assessment plan is developed to identify assessment commitments for the upcoming FY to ensure that required assessments are performed. The organization's assessment plan information shall be submitted to the EMCBC/SLA Assessment Manager to be included in the *Annual Assessment Plan.* The *Annual Assessment Plan* is updated, as required, prior to the start of the FY.

6.4.3 Ensure required assessments for their organization are captured in the *Annual Assessment Plan.*

Integrated Assessment Schedule (see Section 8.2)

6.4.4 Ensure that an organizational assessment schedule is developed to identify planned assessments for the FY. All assessments planned or scheduled (including external assessments) shall be submitted to the EMCBC/SLA Assessment Manager to be included in the IAS, which is updated quarterly, as required.

6.4.5 Review and concur on annual and quarterly (if required) updates to the IAS.

6.4.6 Ensure IAS assessments (specific to their organization) are completed as scheduled or obtain the appropriate organization manager's approval of schedule changes.

Conduct of Assessments (see Section 8.3 – 8.6)

6.4.7 Ensure unfettered access to organization, information and facilities in order to implement an effective oversight program consistent with applicable laws and requirements.

6.4.8 Ensure the qualifications and independence of organizational assessment team members who perform independent assessments.

6.4.9 Ensure the effectiveness of Federal and contractor programs (as applicable) and management systems, including assurance and oversight systems (specific to organizational area).

6.4.10 Ensure a management assessment is conducted of their organization, at least annually, to measure the effectiveness of the management systems and processes and the ability of the organization to meet its objectives.

6.4.11 Maintain qualified staff to conduct organizational assessments, if applicable.

6.4.12 Ensure all assessments status and results are entered and kept current in the EMCBC Pegasus System (or applicable site action tracking system).

6.4.13 Ensure that key assessment information (i.e., subject, type, category, team leader, driver, start and end dates, status, final report, etc.), deficiencies, observations, strengths, and corrective actions are documented and entered into the EMCBC Pegasus System for all organizational specific assessments in the appropriate fields.

6.4.14 For organizations overseeing contractors, ensure that oversight programs and processes are in place to assess contractor performance.

6.4.15 For organizations overseeing contractors, ensure that operational awareness activities, including a walkthrough surveillance program, are implemented.

6.4.16 Ensure that key operational awareness activities information (e.g., organization performing the activities, assessor(s), site, contractor, facility, project, and functional areas covered), and deficiencies are documented and entered into the EMCBC Pegasus System in the appropriate data fields.

Corrective Action Plans (see Section 8.7)

NOTE: Corrective actions tracked in HQ databases and/or contractor tracking systems do not need to be tracked in the EMCBC Pegasus System. However, consideration should be given to tracking these actions for the purpose of trend analysis.

6.4.17 Ensure Federal staff prepare and submit CAPs consistent with this procedure.

6.4.18 Ensure CAPs are developed for assessments that they own within 30 calendar days of receipt of the final report and that these are approved within 60 calendar days of receipt of the report.

6.4.19 Control and approve changes to CAPs and individual action due dates for reviews that they own.

6.4.20 Ensure that Federal staff prepare, as applicable, and submit CAPs consistent with Departmental expectations.

6.4.21 Ensure that completion of corrective actions and resolution of issues are implemented as stated in the CAP and that changes to corrective action commitments and to CAPs are approved by the member of management that approved the initial corrective action or CAP.

6.4.22 Ensure deficiencies, observations or strengths are appropriately categorized in the assessment report.

6.4.23 Perform root cause analysis on recurring or significant deficiencies, as applicable.

6.4.24 Ensure validation is performed for closure of deficiencies.

6.4.25 Ensure that corrective actions for deficiencies are tracked to closure, that deficiencies are trended against baseline performance conditions, and performance measures are established to support continuous improvement.

6.4.26 Ensure that corrective actions for deficiencies are approved, prioritized, and completed in a timely manner consistent with their significance.

6.4.27 Ensure apparent causes are assigned in the EMCBC Pegasus System for deficiencies.

6.4.28 Ensure verifiable evidence is documented and attached or referenced in the EMCBC Pegasus System for closure of deficiencies and corrective actions.

6.4.29 Perform effectiveness reviews of CAP implementation, as appropriate (e.g., effectiveness reviews are required for significant deficiencies in the EMCBC Pegasus System and deficiencies entered in the HQ Corrective Action Tracking System (CATS)).

Feedback and Improvement of the Assessment Program (see Section 8.11)

6.4.30 Establish formal mechanisms and processes for collecting both qualitative and quantitative information on performance and use this information to improve performance.

6.4.31 Identify any applicable lessons learned as a result of conducting assessments and walkthroughs (see IP-230-01, Operating Experience/Lessons Learned Procedure).

6.5 Assessment Working Group

The Assessment Working Group normally should be made up of the organizations assessment Points-of-Contact (POCs).

6.5.1 Implements the *Assessment Working Group Charter*.

6.5.2 Collects assessment requirements from their respective organizations.

6.5.3 Ensures all assessments are documented consistently across the organizations in the template provided by the Assessment Working Group Chair.

6.5.4 Annually evaluates planned assessment schedules from each organization to:

- Check for consistency with the *Annual Assessment Plan.*
- Assist their organization in determining which assessments will be included in the IAS. The Assessment Working Group members evaluate their respective organizations' draft IAS to ensure that it is consistent with the *Annual Assessment Plan.*
- Make recommendations with respect to assessment topics, assessment gaps, and independent assessments.
- Identify opportunities for EMCBC/SLA wide consolidation to minimize redundancy, enhance assessment quality, and optimize subject matter expert (SME) resource use.

6.5.5 Develops lessons learned on the process and recommend improvements to EMCBC/SLA management.

6.5.6 Keeps track of the status of EMCBC/SLA adherence to the final updated *Annual Assessment Plan* and updates the plan as needed.

6.6 Assessor or Assessment Team Leader

The Assessor (for individually conducted oversight and assessment activities) or the Assessment Team Leader (for team oversight and assessment activities) assures complete and accurate oversight and assessment documentation is provided to the applicable record file per IP-243-03, Identifying, Filing, and Maintaining Records.

7.0 GENERAL INFORMATION ON ASSESSMENTS

For detailed guidance describing all aspects of assessment planning, conduct, and reporting see DOE G 414.1-1B, *Management and Independent Assessments Guide.*

7.1 Assessment Program Expectations

The development of an effective assessment and safety management program must focus on achieving DOE expectations, including the following.

- A documented assessment program, defining the systems that will be used to plan, perform, and follow up on assessments, is in place.
- Responsibilities for both performing and responding to assessments are defined.
- Management at all levels is responsive to identified issues, regardless of how they are identified.
- Actions are taken promptly to correct identified problems and prevent recurrence.
- Information can be independently verified.
- Feedback is solicited from a variety of sources (e.g. management, workers, independent evaluations, customers).
- Measurable organization goals and objectives have been identified and progress toward those goals and objectives can be demonstrated.

7.2 Graded Approach

The planning and application of this procedure should be applied using the graded approach. Items, services, or programs that contribute the greatest risk to quality, safety, and mission are assessed with the greatest rigor and frequency. (For detailed guidance see PL-414-01, EMCBC Quality Assurance Program, Appendix D, Graded Approach.)

7.3 Types of Assessments

The EMCBC Quality Assurance Program specifies requirements for the two basic types of assessments: management assessments and independent assessments.

Management Assessments

7.3.1 Management Assessments look at the total picture: how well the management system meets the customer's requirements; the expectations for safely performing work; and the organizational mission, goals, and objectives. The emphasis of management assessment is on management issues that affect performance and related processes such as strategic

planning, personnel certifications, special job requirements and training, staffing, skill sets and requirements, communication, and cost control; organizational interfaces; and mission objectives. The purpose of this type of assessment is to identify areas of potential concern in the management aspects of performance and document a plan to make improvements. Management assessment is an introspective self-analysis to determine whether the management infrastructure is properly focused on achieving desired results. Typically, management assessments are performed at a greater frequency than independent assessments and cover a broader spectrum.

Independent Assessments

7.3.2 Independent Assessments evaluate the performance of work processes with regard to requirements, compliance, and expectations for safely performing the work and achieving the goals of the organization. The focus of independent assessments should be the items and services produced and their associated processes. The purpose is to improve product/service performance and process effectiveness. Independence is defined as not having direct responsibility for the work being assessed. Independent assessments typically are performed by personnel from organizations or work units outside the one being assessed. Thus, management receives an objective review and report of the assessed activity. Independent assessments are typically performed less frequently than management assessments but go into greater depth.

7.4 Organizational Activity Levels

To shape a comprehensive assessment program that optimizes the application of each assessment type, it may be helpful to visualize the organization as having three interlinked levels of activity. These levels will be referred to as "process," "system," and "program." A process is a collection of steps or actions that yield some intermediate outcome. A system is made up of two or more processes that may operate independently or interdependently and may yield a complete product or service. A program is the most complex level and consists of multiple, interdependent systems that often require many interfaces to provide the desired product or service. Management and independent assessments can be applied at all three levels but will examine different aspects of them.

Process Level Assessments

7.4.1 Process level assessments involve examination of work controls and verification that they are being implemented effectively. This level of assessment is critical for ensuring that the worker, the public, and the environment are protected from harm. Process level assessments should also assess the effectiveness of the processes from a quality and customer satisfaction perspective.

System Level Assessments

7.4.2 System level assessments focus on whether appropriate leadership and support systems are provided to enable the implementation of work processes. These assessments are performed to ensure human and material resources are being properly used to achieve an organization's mission and objectives. This level of assessment may range from informal daily oversight of performance to formal periodic evaluations using established protocols.

Program Level Assessments

7.4.3 Program level assessments are used to determine whether overall organizational programs are properly established and implemented. They are appropriate for evaluating complex organizations from several perspectives; consequently, program assessments usually examine the integration of the many systems designed to achieve organizational goals and customer expectations (with an emphasis on ES&H factors).

7.5 Assessing for Compliance, Effectiveness, and Performance

There are three different methods commonly used for accomplishing assessments. These are usually known as compliance assessment, effectiveness assessment, and performance-based assessment. While each method has distinct characteristics, a good assessment will use elements of all three.

Compliance Assessment

7.5.1 Compliance assessment focuses on verifying compliance with requirements through the implementation of procedures. Compliance assessment begins with a determination of the contractual and regulatory requirements binding the assessed organization. Assessors then verify that requirements flow down to implementing documents such as procedures, whose implementation is in turn verified.

Effectiveness Assessment

7.5.2 Effectiveness assessment begins like compliance assessment, looking for implementation of requirements in procedures and compliance with the procedures in the workplace. This is followed by a determination whether pure compliance has led to effective implementation of the intent of the top-level requirements. The assessor is expected to determine whether a noncompliance or series of non-compliances with procedures could actually result in a failure to satisfy top-level requirements. The assessor must return to the top-level requirements to determine the program effectiveness.

Performance-Based Assessment

7.5.3 Performance-based assessment takes a different approach by focusing first on the adequacy of the process that produced a product or service and then the product itself. If problems are found in the product or work processes, then the assessor evaluates the methods and procedures used to implement the applicable requirements. This is done to find the failure that led to the problems.

In performance-based assessment, great emphasis is placed on getting the full story on a problem before coming to a conclusion. If an assessor sees a problem with the execution of a welding process, he or she should determine the extent of the problem. Is it limited to one welder? Is it limited to one process? Can the problem be traced to the qualification program for the welder or to the qualification program for the welding process? Or is there a problem with the weld material itself, indicating an engineering or procurement problem?

While the assessor must be familiar with requirements and procedures, in performance-based assessment the assessor's experience and knowledge play an integral part in determining whether requirements are satisfied. Therefore, participants in performance-based assessments must be technically competent in the areas they are assessing. For example, if an assessor is evaluating a welding process, the assessor relies heavily on his or her knowledge of welding codes, welding processes, and metallurgy, rather than just verifying simple procedure compliance.

7.6 Application of ASME NQA-1-2004 Audits and Surveillances

ASME NQA-1 defines audit as …*a planned and documented activity performed to determine by investigation, examination, or evaluation of objective evidence the adequacy of and compliance with established procedures, instructions, drawings, and other applicable documents, and the effectiveness of implementation. An audit should not be confused with surveillance or inspection activities performed for the sole purpose of process control or product acceptance.*

When the purpose of assessment activity is to perform an NQA-1 based audit, care should be taken to differentiate this by referring to the assessment activity as Full Scope Audit or Partial Scope Audit. A partial scope audit typically examines only a small portion of an entire program (e.g., one or two of the 18 NQA-1 quality assurance requirements), could be mistaken for a traditional surveillance, but actually has a different focus.

7.7 Application of DOE-STD-3006-2000 Line Management Self Assessments (LMSA) for Startup and Restart of Nuclear Facilities

DOE-STD-3006-2000 provides guidance on approaches and methods approved as acceptable for implementing the requirements for Startup and Restart of Nuclear Facilities. DOE O 425.1C, *Startup and Restart of Nuclear Facilities*, 4.d., *Minimum Core Requirements*, must be addressed for LMSAs. LMSAs are planned and documented in accordance with this procedure. Justification must be provided in the Plan of Action if it is determined that a particular core requirement will not be reviewed.

7.8 DOE Line Management Oversight

The EMCBC Oversight Plan specifies that DOE line management maintain sufficient knowledge of site and contractor activities to make informed decisions about hazards, risks and resource allocation, provide direction to contractors, and evaluate contractor performance. The effectiveness of contractor assurance systems, the hazards at the site/activity, and the degree of risk are factors in determining the scope and frequency of DOE line management assessments and operational awareness activities. This is done primarily through oversight processes.

For the purposes of assessment planning, it is recommended that the following major program divisions be chosen to parallel those identified for contractor site programs (see DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, Attachment 2):

- Quality Assurance
- Integrated Safety Management (including the Environmental Management System)
- Integrated Safeguards and Security Management
- Cyber Security
- Emergency Management

7.9 Oversight Processes

The EMCBC Oversight Plan implements the five DOE Line Management Oversight Processes identified below primarily through this procedure.

Operational Awareness Activities

7.9.1 DOE line management, primarily through field organizations, must conduct routine day-to-day monitoring of work performance through facility tours/walk-throughs, work observation; document reviews, meeting attendance and participation, and ongoing interaction with contractor workers, support staff, and management.

Assessments of Facilities, Operations, and Programs

7.9.2 DOE line management must establish and implement assessment programs to determine contractor compliance with requirements.

Assessments of Contractor Assurance Systems

7.9.3 DOE requires that contractor assurance systems address all organizations, facilities, and program elements.

Evaluations of Contractor Performance

7.9.4 As contracting officers, DOE line management must periodically evaluate contractor performance in meeting contractual requirements and expectations.

Self-Assessments of DOE Line Management Functions and Performance

7.9.5 DOE Headquarters and field organizations must have a structured, documented self-assessment program for environment, safety, and health; safeguards and security; cyber security; and emergency management to comply with DOE requirements. DOE organizations must perform self-assessments of programmatic and line management oversight processes and activities (e.g., security surveys, facility representative programs, personnel qualification standards, and training programs) to assess whether requirements and management expectations are met. The frequency of assessments of these functions must be commensurate with the hazards and risks related to the activity being assessed. Continuous improvement mechanisms (e.g., corrective action processes) must be in place to improve the effectiveness and efficiency of oversight programs and site operations.

8.0 PROCEDURE

8.1 Annual Assessment Plan

8.1.1 General Instructions

The *Annual Assessment Plan* is a high-level scoping document that identifies the assessment commitments for the upcoming FY to ensure all required assessments are performed. The Assessment Working Group is composed of representatives from applicable EMCBC/SLA organizations and is chartered by the EMCBC/SLA Assessment Manager to develop the *Annual Assessment Plan* and assist in development of the IAS.

NOTE: Many DOE program oversight requirements specify assessing entire program elements over a minimum of a three-year cycle. In these cases, the assessment planning process needs to track assessment activity through the *Annual Assessment Plan* and/or *Integrated Assessment Schedule* to assure these requirements are met.

8.1.2 Development of the Annual Assessment Plan

- The *Annual Assessment Plan* document is updated annually, prior to the start of the FY.
- The *Annual Assessment Plan* is implemented through organizational assessments contained in the IAS.
- Initial updates to the *Annual Assessment Plan* for the FY are initiated with a memorandum from the EMCBC/SLA Assessment Manager.
- The Assessment Working Group Chair provides the Assessment Working Group with an electronic template and instructions on how to complete the template.
- Once each organization has populated the template, the *Annual Assessment Plan* is sent to the members of the Assessment Working Group for approval. Once the Assessment Working Group agrees on the plan, the Assessment Working Group Chair prepares the transmittal package to be approved by the EMCBC/SLA Assessment Manager.

8.2 Integrated Assessment Schedule

8.2.1 General Instructions

The EMCBC/SLA IAS provides for implementation of the approved *Annual Assessment Plan.* The IAS is established to capture and plan for all assessments set for a given FY. This includes all Type 1, Type 2, and Type 3 Assessments. They are defined as follows:

Type 1 Assessments typically involve larger assessment teams and diverse scopes, are carefully planned, and may require significant contractor and DOE preparation. These assessments are coordinated across the DOE assessment groups. Type 1 Assessments require more formality in the conduct of the assessment, including entrance meetings, daily or weekly briefings, and exit meetings.

Examples include Integrated Safety Management System Phase I, Phase II, and Annual Reviews, Operational Readiness Reviews, and HQ Audits. Some Type 1 Assessments require detailed planning and technical evaluation beyond the scope of this assessment procedure and are conducted per type-specific procedures (e.g., EMCBC Support for Startup/Restart of Nuclear Facilities).

Type 2 Assessments have shorter time frames between the identified need and execution of the assessment. The assessments are typically smaller in scope, more focused to cover fewer review areas, do not have large assessment teams, and do not require significant DOE or contractor preparation. Type 2 Assessments are typically needs driven by an incident, root cause or trend information, request by another DOE organization, or the results of a contractor self assessment or external assessment.

Examples include one, two, or three team member assessments lead by site SMEs or EMCBC SMEs focused on a particular functional area, facility, or

system (e.g., FEOSH, Quality Assurance, Electrical Safety, Radiation Protection, Safety Systems, Environmental Monitoring Systems, Waste Processing Facilities, etc.)

Type 3 Assessments are also called operational awareness activities, walk-throughs, or walking your spaces. These would typically be used by Facility Representatives and other members of the EMCBC/SLA technical staff. These assessments require no long–range advance planning; visual observation is the technique typically used for conducting such assessments. If there are deficiencies, these are tied back to requirements wherever possible so that the results can be tracked and trended.

Examples include facility walkthroughs, surveillances, management walkthroughs, procedure reviews, lockout/tagout walkdowns, logbook reviews, control room observations, etc.

8.2.2 Development of the EMCBC/SLA IAS (See PD-414-03, EMCBC Pegasus Users Guide for information regarding previous assessment schedules and reports.)

The IAS is developed from organizational input to the assessment requirements identified in the *Annual Assessment Plan*. Once a workable IAS has been completed, the EMCBC/SLA Assessment Coordinator prints the IAS and sends it to the EMCBC/SLA Assessment Manager for approval. The approved IAS is entered into the EMCBC Pegasus System or applicable site scheduling/tracking system.

Any changes to the approved IAS are discussed with and approved by the appropriate organizational manager, and the justification for the change is documented in the EMCBC Pegasus System.

8.3 Conduct of Assessments

8.3.1 General Instructions

Assessments are conducted to ensure effective and efficient programs and operations and to identify and correct problems that hinder the organization from achieving its objectives. An assessment is the act of reviewing, evaluating, inspecting, testing, checking, performing surveillance, auditing, or otherwise determining and documenting whether items, processes, or systems meet specified requirements and are performing effectively.

DOE HQ conducts independent oversight assessments of EMCBC/SLA sites and its contractors. EMCBC/SLA line organizations conduct local oversight assessments to ensure that contractors are meeting the intent and requirements of their contracts with DOE. Requirements for contractor oversight are contained in DOE P 226.1A, *Department of Energy Oversight*

Policy, and DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*.

Management/functional assessments are conducted by EMCBC/SLA support organizations that have cognizance of that service function. The line organizations and support organizations are also responsible for conducting self-assessments of themselves (see Section 7.0 for general guidance on oversight and assessments).

The EMCBC/SLA assessment process involves six phases:

(1) Assessment planning and scheduling,
(2) Conduct of assessments,
(3) Documentation and communication of assessment results,
(4) Corrective action development and implementation,
(5) Deficiency tracking to closure, and
(6) Continuous improvement.

The assessed EMCBC/SLA organization (for Federal assessments) or line management (for assessments of contractors) ensures that the final assessment results which are not tracked by a formally recognized HQ corrective action tracking system, such as CATS, are captured in the EMCBC Pegasus System (or applicable site action tracking system) and tracked to closure.

8.3.2 Training and Qualification of Team Leaders and Assessors

Staff selected to be Assessment Team Leaders or Assessors for specific assessments should have experience or training commensurate with the scope, complexity, or special nature of the activities to be assessed. For independent assessments, the Assessment Team Leader and Assessors should be independent of any direct responsibility for the performance of the activities which they assess. The Assessment Team Leader is appointed by the responsible manager with sufficient time in advance of the assessment to ensure proper coordination and planning. Selection of prospective Assessment Team Leaders and Assessors should include verifiable evidence that education and experience have been accumulated as identified in IP-361-01, Training and Qualification for Federal Employees.

NOTE: ASME NQA-1 requires an NQA-1 Qualified Lead Auditor to lead or conduct audits.

NOTE: The requesting manager may consider other performance factors applicable to conducting assessments that may not be explicitly called out in this guidance. Examples of these factors are interpersonal skills, leadership, sound judgment, maturity, analytical ability, tenacity, past performance, and quality assurance (QA) or accident investigation training courses. The requesting manager may waive specified education or experience

requirement with documented justification, such as years of work experience in the subject area or other credentials as stated above.

8.3.3 Assessors or Assessment Team Leads perform the following (see PD-414-03, EMCBC Pegasus Users Guide, for additional Lead Assessor roles and responsibilities):

- Ensure that personnel performing technical assessments possess suitable qualifications commensurate with the nature and type of assessment to be conducted.
- Ensure that assessment personnel are briefed on the type-specific assessment procedure, if applicable, as well as the contents of this procedure prior to commencing the assessment activities.

  NOTE: The requesting manager relies on the training and experience of assessment personnel in the specific areas being assessed as the basis for ensuring suitable qualification. Assessment personnel with little knowledge and experience in the subject area may be teamed with or obtain guidance from more experienced personnel. Assessment guidance contained in DOE Directives/Standards, EMCBC/SLA procedures, contractor operating procedures, or other requirements documentation should be used, as necessary, depending on the individual's experience level.

- Plan the overall assessment. The Assessor or Assessment Team Lead normally perform the following:

  (a) Obtain input and assistance from other organizations,
  (b) Assemble an assessment team (if applicable),
  (c) Develop an assessment plan and obtain concurrence from the responsible manager. Attachment A provides items to be considered when determining program elements to be assessed.
  (d) Identify the appropriate point of contact in the organization being assessed.
  (e) Make arrangements with the requestor and points of contacts for the organization to be assessed to confirm the planned assessment dates and to ensure that proper personnel will be available. Make arrangements for offices and computer equipment/printers for the team, meeting and interview rooms, office supplies, and administrative support.
  (f) Determine the requirements for entering the necessary facilities (e.g., radiological, training, and security), and ensure that all access requirements are met prior to the start of the fieldwork.
  (g) Obtain input from any associated SMEs on previously observed weaknesses and areas of information or concern (use the EMCBC Pegasus System if the information is available).
  (h) Determine the probable length of time required for the assessment fieldwork.

(i) Develop lines of inquiry from defined assessment criteria that may exist in DOE and additional sources.
(j) Ensure that the scope and schedule of the assessment are communicated to assessment team members (if applicable) and others, as appropriate, prior to conducting the assessment. The appropriate method for communicating this information (e.g., meeting, writing, telephoning) is at the discretion of the Assessor or Assessment Team Lead.
(k) Work with the assessed organization to ensure the assessment status is documented in the EMCBC Pegasus System.
(l) Manage the conduct of the assessment. In performing assessments, assessment personnel do not replace or substitute for line management. Assessment Lead/Team Leader should conduct themselves in a manner that does not permit the appearance of absolving the assessed organization from compliance with established programs or procedures.
(m) Keep the appropriate DOE line and support organization management informed of the ongoing assessment results.

8.3.4 Assessment Team Members (if applicable) perform the following:

- Prepare for the assessment by assisting in development of lines of inquiry or checklists, reviewing requirements and procedural documents.
- Interface with operations personnel while conducting assessments to understand the system, program, or facility being assessed as official representatives of DOE, exercising authority consistent with DOE's program and management guidance and in a manner that is objective, factual, formal, and non-confrontational. Special care should be taken to ensure that field observation activities do not interfere with the normal conduct of operations or alter the performance of these operations.
- Inspect and observe, collect facts, assess against requirements and performance in accordance with the Assessment Plan, and document the identified results as strengths, deficiencies, and/or observations.
- All assessment personnel must comply with appropriate facility/site safety requirements. An overview of the Assessment Team Members' duties is provided in Attachment B.

8.4 Reporting Assessment Results

NOTE: See PD-414-03, EMCBC Pegasus Users Guide, for additional Lead Assessor roles and responsibilities when sites adopt the EMCBC Pegasus System.

8.4.1 Assessor or Assessment Team Lead ensure that assessment results are documented in a timely manner in an assessment report (i.e., produce a draft report within two weeks of completing the review and produce a final report within 30 calendar days of the review). An overview of standard report contents is provided in Attachment C.

8.4.2 Assessor or Assessment Team Lead ensure that immediate notification is provided to the cognizant DOE manager and the contractor's senior management if operating requirements and required actions are not within limits, if a significant occupational safety and health regulation noncompliance is identified, or if unmitigated hazards are identified.

8.4.3 The ES&H- and quality-related deficiencies should express the specific nature of the condition in a clear, concise, direct manner that will allow the assessed organization to translate them into corrective actions (if applicable).

8.4.4 Each assessment result that is to be tracked by EMCBC/SLA sites must be identified or cross-referenced in the assessment report as a deficiency, observation, or strength.

8.4.5 The Assessor or Assessment Team Lead should verify the factual accuracy of the identified deficiencies with representatives of the assessed organization(s).

8.4.6 The Assessor or Assessment Team Lead should provide the formal assessment report simultaneously to the Federal manager of the assessed organization and the Contracting Officer's Representative, as appropriate.

8.5 Requirements for Deficiencies

8.5.1 The following is required for Significant Deficiencies:

- Identification of requirement(s) not met,
- Receive management acknowledgement prior to entry in Pegasus,
- A one-time notification is sent to key DOE EMCBC/SLA managers when a new significant deficiency is initially saved in Pegasus,
- Require a causal code (apparent cause) to be assigned in Pegasus,
- Identification of functional area in Pegasus to support trending,
- Root cause analysis,
- Evidence is required for closure of corrective actions,
- Verification of closure required for corrective actions, and
- Effectiveness review.

8.5.2 The following is required for Deficiencies:

- Identification of requirement(s) not met,
- Receive management acknowledgement prior to entry in Pegasus,
- Require a causal code (apparent cause) to be assigned in Pegasus,
- Identification of functional area in Pegasus to support trending,
- Evidence is required for closure of corrective actions, and

- A management decision on whether to apply effectiveness reviews depending upon severity and extent.

8.5.3 The following is required for Observations:

- All observations will be trend only,
- Identification of functional area in Pegasus to support trending, and
- No actions can be assigned to observations.

8.6 Tracking Assessment Results to Closure

8.6.1 EMCBC/SLA organization (for Federal assessments) or line management (for assessments of contractors) ensures that the final assessment results which are not tracked by a formally recognized HQ corrective action tracking system, such as CATS are captured in the EMCBC Pegasus System and tracked to closure.

8.6.2 For assessments of Federal organizations, the Assistant Director/Federal Project Director of the assessed organization tracks the assessment deficiencies to closure in the EMCBC Pegasus System. The Assistant Director/Federal Project Director is responsible for ensuring that corrective actions are developed to address the deficiencies against the EMCBC/SLA site organization and that objective evidence of closure is maintained. All EMCBC/SLA site organizations are responsible for trending the deficiencies against their organizations.

8.7 Corrective Action Plans

8.7.1 General Instructions

The information in this section is a synopsis of information included in DOE O 414.1C**,** *Quality Assurance*, Attachment 4, *Corrective Action Management Program*. CAPs are usually developed for formal assessments that identify deficiencies, but not all assessment reports require development of a CAP. It depends on the quantity and severity of the deficiencies and the type of assessment as to whether EMCBC/SLA assessment management will decide to develop a CAP. In the event that a CAP is required, this section describes development of a formal, detailed CAP.

NOTE: See PD-414-03, EMCBC Pegasus Users Guide, for additional Lead Assessor roles and responsibilities when sites adopt the EMCBC Pegasus System.

8.7.2 CAP Development and Approval

- The EMCBC/SLA line manager assessment POC prepares a single, comprehensive CAP to address the deficiencies contained in a single report.

- The CAP should describe the basis for the disposition of each identified deficiency. The EMCBC/SLA line manager assessment POC may determine that no action will be taken in response to the deficiency. In this case, the CAP must describe the basis for this determination and if the deficiency involves safety, describe how safety will be maintained.
- A simple CAP for a few deficiencies from an assessment of one organization can be a single page and can be approved by the EMCBC/SLA organizational manager. A CAP for an assessment that covered multiple organizations and includes five or more deficiencies should follow the sample CAP content guidance included in Attachment D and be approved by the EMCBC/SLA Assessment Manager.
- In general, a CAP should include the following information:

  (a) State how the deficiencies will be tracked (i.e., Pegasus, CATS, etc.),
  (b) List each deficiency separately,
  (c) For each deficiency, provide the following information:
    - Clear and concise description of the reported deficiency.
    - Description of the corrective action(s) to be used to resolve the deficiency.
    - Description of the deficiency evaluation, as applicable, to include discussion of causal factor identified. This may include background, facts, evaluation activities, and causal analysis, including root cause analysis. Refer to Attachment E for more information on performing root cause analysis. Responsible manager and individual for each action.
    - Deliverable(s) for each action (e.g., memorandum, revised procedure).
    - Planned completion date for each action.
    - The mechanisms for independent verification of closure of each action and validation of issue resolution, if applicable.

  NOTE: Typically, several actions may be linked to one deficiency, but an action should only be linked to one deficiency in order to facilitate tracking it to closure.

  (d) If multiple organizations will participate on an action, line management should determine who will be the lead for the action(s),

  NOTE: The EMCBC/SLA approving authority may require a causal analysis to be performed and the results included in the CAP. For CAPs to be submitted to HQ, a thorough analysis of the underlying causal factors is required to determine whether systemic weaknesses exist.

(e) State whether an effectiveness review will be performed when the CAP is closed to determine if the corrective actions resolved the deficiencies. Refer to Attachment F for more information on performing effectiveness reviews,
(f) Describe how the CAP and associated corrective actions will be tracked and reported to completion,
(g) Describe the process for approving changes or extensions to corrective action completion dates, effectiveness reviews, or other activities listed in the CAP after approval,
(h) Get the CAP formally approved by the appropriate member of EMCBC/SLA management or, if necessary, by HQ,
(i) Prepare CAPs within 30 calendar days after the report is complete, and approve CAPs within 60 calendar days after the report is complete,
(j) Ensure that the issues and corrective action information from the approved CAP are entered into the EMCBC Pegasus System.

8.7.3 CAPs for Headquarters Reviews and Type A Accident Investigations.

CAPs developed in response to deficiencies identified by the HQ Office of Health, Safety and Security (HSS) must conform to the process and requirements contained in DOE O 470.2B, *Independent Oversight and Performance Assurance Program*. Additional guidance is provided in Volume 2, Appendix G, *Feedback and Improvement Mechanisms* of DOE G 450.4-1B, *Integrated Safety Management System Guide*. In addition, CAPs for Environmental Management (EM) facilities must also comply with EM Policy Memorandum, Policy for Content and Implementation of Corrective Action Plans (CAP), dated October 4, 2001.

- When the HQ process for the assessment/investigation requires a CAP, the responsible line manager assessment POC must complete the CAP and obtain approval from the appropriate approval authority (frequently the HQ Program Office) within 60 calendar days of the issuance of the assessment/investigation report.
- The responsible EMCBC/SLA site line manager ensures that the assessment/investigation deficiencies and the actions are documented and entered into the HQ tracking system (e.g., CATS) within 10 working days of receiving approval of the CAP.
- Actions to be tracked in CATS include deficiencies from the following:

  (a) Deficiencies identified by HSS during ES&H and emergency management assessments,
  (b) Judgments of Need identified by Type A Accident Investigations,
  (c) Deficiencies identified by the HQ Office of Aviation Management or the HQ Office of Management, Budget and Evaluation and HSS,

(d) Other sources as directed by the Secretary or Deputy Secretary, including crosscutting safety issues (e.g., the November 11, 1999, memorandum that established the DOE Nuclear Criticality Safety Improvement Initiative).

- Describe the mechanism for independent verification of the closure of the actions. This type of closure verification is required for CAPs submitted to DOE HQ.
- Briefly describe the effectiveness review that will be performed when the CAP is closed to determine if the corrective actions resolved the deficiencies. Effectiveness reviews are required by DOE O 414.1C for CAPs submitted to DOE HQ. Effectiveness reviews will—

  (a) Determine whether the completed corrective actions have or have not effectively resolved and prevented recurrence of the same or similar deficiencies at the performance level,
  (b) Identify additional actions necessary to effectively resolve the deficiency and prevent recurrence, and
  (c) Collect effectiveness data for subsequent analyses and sharing of Lessons Learned.

- The EMCBC /SLA Assessment organization lead prepares a monthly report for senior management on the status of corrective actions. This report is pulled from the EMCBC Pegasus System and/or CATS, if applicable.

8.7.4 Implementing and Closing the CAP

- CAP Implementation: The EMCBC/SLA organization line manager should ensure completion of the actions identified in the CAP, and track and trend the deficiencies. If the deficiency is being tracked in Pegasus, the closure evidence should be attached to the appropriate action when it is closed. When all of the actions in the CAP are completed and documented as closed in Pegasus or CATS (thereby closing the deficiencies), the responsible line manager should document this in a memorandum to the approving authority.
- Closing Actions and Deficiencies in Pegasus: To acceptably close an action, attach a Word file or pdf file of the closure documentation (i.e., the deliverable identified in the CAP for that deficiency) in Pegasus.
- CAP Verification: The EMCBC/SLA organization line manager is responsible for requesting an independent verification, when necessary. If an independent verification is necessary, it should be performed by persons with sufficient independence from those who performed the actions identified in the CAP.
- Effectiveness Review: The EMCBC organization line manager's organization may review completed corrective actions for adequacy in resolving the original deficiency. DOE O 414.1C, Attachment 4, provides additional information on performing effectiveness reviews. If

the corrective action did not resolve the original deficiency, a new deficiency should be identified and entered into Pegasus or CATS for resolution. Effectiveness reviews are required for CAPs that are entered in CATS. Refer to Attachment F for more information on performing effectiveness reviews.

8.7.5 Change Control Process for CAP

Once the CAP has been approved, it is loaded in the EMCBC Pegasus System. The only authority that can approve changes to the planned completion dates for the corrective actions in the CAP is the authority that approved the CAP. When a change is made to a CAP action (e.g., the due date or the corrective action itself) in Pegasus, a justification for the change and the name of the person who approved the change is entered. In addition, documentation of the approved changes should be attached.

8.8 Operational Awareness Activities

8.8.1 General Instructions

Walkthroughs and surveillances are a key component of EMCBC/SLA sites operational awareness activities and contractor oversight programs. Walkthroughs and operational awareness visits involve observation of site conditions and contractor activities to verify that safe working conditions exist and applicable requirements are being followed during work implementation. Attachment G provides a process summary for walkthroughs. EMCBC/SLA line managers are expected to have an Operational Awareness Program that includes conducting routine day-to-day monitoring of work performance through facility walkthroughs, work observation, document reviews, etc.

EMCBC/SLA line managers are expected to have a Walkthrough and Surveillance Program that includes periodic inspection visits or tours by management and senior staff of facilities and operations. The line managers could be accompanied by Facility Representatives or other EMCBC/SLA staff performing routine field duties. The Facility Representative or EMCBC/SLA staff participant documents the walkthrough in the EMCBC Pegasus System. These walkthroughs may be scheduled prior to the visits.

8.8.2 Conducting a Walkthrough or Surveillance

- Walkthroughs and Surveillances may be scheduled or unscheduled to cover planned or emerging topics. Checklists should be developed prior to performing the walkthrough, but these are not mandated. Many walkthroughs are performed by Facility Representatives. However, managers and other staff also perform walkthroughs and surveillances on a regular basis. Occasionally, SME and technical support is needed, depending on the area of review.

- A portion of the walkthroughs can be joint walkthroughs with the contractor. Line organizations should ensure that their contractors have robust walkthrough programs.

8.8.3 Stop Work Authority

Any condition that has caused or poses an imminent danger to people, property, the environment, or the operational integrity of a facility shall be cause to immediately suspend operations upon identification of the condition. All EMCBC/SLA Federal employees have authority to stop work when conditions are judged to be an imminent threat to health, safety, or the environment in accordance with the EMCBC FEOSH Program.

8.8.4 Documenting a Walkthrough

- All Walkthroughs are to be documented in Pegasus. Each walkthrough event, regardless of the number of participants, should only be recorded in Pegasus one time. The group participating in the walkthrough should agree on which individual will document the walkthrough and its results.
- Deficiencies, observations or strengths are recorded in Pegasus in order to allow the issues to be trended.
- Most issues generated from a walkthrough or surveillance will be trend only observations. If a deficiency is documented, then a corrective action response should be required and tracked to closure. For deficiencies, the issue is tracked in Pegasus; however, contractor correction actions should generally be tracked in the contractor's Corrective Action System. For additional information on requirements associated with deficiencies, refer to Section 8.5.
- Observations are used for trending purposes only. Corrective actions are not applicable to observations. Observations can be indicators of trends in a particular area or at a particular facility.
- Issues are categorized by functional area for EMCBC/SLA trend analysis. The most current list of trending functional areas and sub-areas will be located in Pegasus. In addition, the facility should be identified, if applicable, so that it can be used for trending.
- All walkthroughs and surveillances should be recorded in Pegasus as soon as practical after completion of the walkthrough (i.e., within three working days).

8.9 Document Reviews

Document reviews can be conducted formally as part of an audit or assessment and included in the assessment reporting. Document reviews can be conducted informally as part of operational awareness activities during a walkthrough or system walkdown. Document reviews conducted separately, such as review of contractor deliverables, are a form of assessment and should be formally documented. Attachment H provides guidance for formal document reviews.

8.10 Performance Indicators and Trending

8.10.1 General Instructions

Performance indicators and measures are one mechanism used to help line management identify adverse trends and promote improvements. This data is considered in a variety of management decisions, such as allocating resources, establishing goals, identifying performance trends, identifying potential problems, and applying Lessons Learned and good practices (see IP-230-01, Operating Experience/Lessons Learned Procedure). Attachment I depicts key steps in the trending process.

8.10.2 Data Collection for Trending

Accurate data for trending purposes is critical. EMCBC/SLA sites should be able to quickly identify and respond to issues based on accurate information. The EMCBC Pegasus System enables EMCBC/SLA sites to centralize assessment related and walkthrough related data. It also allows EMCBC/SLA sites to look at data consistently across organizations and time periods. Pegasus is able to track the status of any follow-up items, and several options are available for viewing data. Currently, trend analysis can be performed over time, as well as on various functional areas, functional sub-areas, facilities, finding severity levels, and other fields. Once data is entered into Pegasus, reports are generated so that the trends can be evaluated. In addition to trending data from assessments and walkthroughs/surveillances, event-driven data (e.g. occurrences, injuries and illnesses, accidents, etc.) should also be collected and entered into the EMCBC Pegasus System for trend analysis.

8.10.3 Requirements

- EMCBC/SLA organizations are expected to identify performance indicators and perform trend analysis. As part of their oversight function, line organizations should review the results of their contractor's trending evaluations.
- EMCBC/SLA sites may utilize the Assessment Working Group to meet on a periodic basis and screen assessment issues, trends, Lessons Learned (from assessments and walkthroughs), and provide feedback on trending information that is useful for continuous improvement. The objective is to:

  (a) Improve the consistency of assigning severity to issues,
  (b) Provide a management perspective on data trends coming out of assessments and walkthroughs, and
  (c) Provide an opportunity to adjust priorities of assessment and walkthrough efforts or management of issues and actions if needed.

The group would meet quarterly except when emerging or significant issues need more immediate attention.

8.11 Feedback and Improvement of the Assessment Program

EMCBC/SLA sites conducting assessments and being assessed are expected to share Lessons Learned to be used to improve the assessment process and other elements of the EMCBC/SLA Assessment Program. Conduct of walkthroughs also provides a means to provide feedback on how to improve the process. Feedback mechanisms available to EMCBC/SLA sites for improving the Assessment Program include, but are not limited to:

(1) Lessons Learned from teams conducting various types of reviews and walkthroughs, independent assessment conducted by external organizations, training courses, and working groups,
(2) Establishing performance metrics and tracking/trending performance,
(3) Obtaining customer feedback from organizations being assessed, and
(4) Benchmarking best practices from other government offices, contractor methods, industry, and consensus groups.

Assessors or Assessment Team Leaders capture and document applicable Lessons Learned (on conducting the assessment) in the assessment report. The organization being assessed is responsible for ensuring that Lessons Learned documented in the assessment report are entered into the EMCBC Pegasus System. Lessons Learned during the conduct of assessments and walkthroughs should be entered in Pegasus using the Lessons Learned features that are available. Pegasus can associate a Lessons Learned with a particular assessment, which enables trending by type of assessment and provides useful information for the next team conducting that type of assessment.

9.0 RECORDS MAINTENANCE

The following documents generated by this procedure must be processed in accordance with IP-243-03, Identifying, Filing, and Maintaining Records:

- assessment working group charter;
- annual assessment plan;
- integrated assessment schedule;
- request for the assessment (electronic mail message or memorandum);
- assessment plan;
- assessment report;
- walkthrough report;
- surveillance report;
- corrective action plan;
- document review;
- performance analysis report;
- verification report;

- effectiveness review;
- monthly corrective action status report;
- corrective action closure evidence documents;
- original field notes, as appropriate;
- other documents and evidence, as appropriate.

10.0 FORMS USED – Not Applicable

11.0 ATTACHMENTS

11.1 Attachment A – Items to be Considered when Determining Program Elements to be Assessed
11.2 Attachment B – Assessment Team Member Duties
11.3 Attachment C – Overview of Report Contents
11.4 Attachment D – Overview of Corrective Action Plan Contents
11.5 Attachment E – Root Cause Analysis Guidance
11.6 Attachment F – Effectiveness Review Guidance for EMCBC/SLA Performed Assessments
11.7 Attachment G – Operational Awareness Activities Guidance
11.8 Attachment H – Document Reviews Guidance
11.9 Attachment I – Performance Measures & Trend Analysis Guidance
11.10 Attachment J – Definitions & Acronyms

ITEMS TO BE CONSIDERED WHEN DETERMINING PROGRAM ELEMENTS TO BE ASSESSED

The Assessment Team Leaders should consider when determining the program elements to be assessed (but not limited to) the following:

1. Contractual requirements
2. Past deficiencies and corrective actions (including corrective actions or compliance orders imposed by oversight authorities such as other Federal agencies - e.g., DFNSB, NRC, OSHA - or State agencies)
3. Implementation of corrective actions
4. Results of other assessments including external assessments, evaluations, or events (e.g., investigation reports, implementation of lessons learned items, causal analysis, effectiveness reviews, reportable occurrences, etc.)
5. Past and current management issues
6. Additional considerations for support service organizations:
   - Identification of customers,
   - Identification of customer requirements,
   - Alignment of processes with key business drivers, and
   - Establishment of customer service standards.
7. Potential risk to workers, the public, and the environment
8. Conditions indicative of known or suspected noncompliance
9. Special interests or priorities (e.g., request from HQ, upcoming external audits, etc.)
10. Investigation report topics
11. Lessons learned item(s)
12. Areas for which little information is available or documented (e.g., areas that have not been previously reviewed)
13. Negative trends
14. Contractor internal assessment data
15. Current or past management issues
16. Annual Operating Plan and award fee milestones
17. Available time and resources
18. Time since element was last assessed
19. Significant changes in the element (personnel, procedures, system, etc.)
20. Cost, risk, schedule, etc.

(Reference: DOE G 414.1-lB, *Management and Independent Assessments Guide*)

ASSESSMENT TEAM MEMBER DUTIES

Assessment personnel inspect and observe, conduct interviews, collect facts, assess the facility against requirements and performance in accordance with the assessment plan, and document potential strengths, deficiencies and observations. Although much of a programmatic technical assessment may consist of a rollup of facility-specific technical assessments, it is expected that normally some amount of fieldwork will still be conducted to supplement or verify the facility-specific data. In some cases, the Assessment Team Member may have acquired sufficient knowledge through routine fieldwork conducted to maintain operational awareness and so may not need to conduct additional fieldwork as part of the assessment. The duties of the Assessment Team Member usually include the following:

A. Conduct a performance based assessment. Assessment techniques include but are not limited to the following:

1. Observation of process evolutions and drills
2. Walk down systems
3. Observation of facility conditions and cleanliness
4. Observation of adherence to established procedures and schedules
5. Inspection of equipment and observation of maintenance evolutions
6. Interview of appropriate personnel
7. Review of documents to support performance-based assessments, such as the following:
   a. Logs and program records,
   b. Personnel training and qualification records.

B. For programmatic assessments, review and discuss the following, as applicable.

NOTE: Attachment A provides a list of items to be considered when determining the program elements to be assessed.

1. Results from facility-specific assessments of program elements.
2. The contractor's applicable site-level implementing policies and procedures.
3. Criteria identified in an annual assessment plan for site-level assessment of the program element.

C. Evaluate activities beyond the scope of the lines of inquiry, as necessary, to address the problem areas observed.

D. Use a systematic method to record information obtained during interviews. Information may be recorded as field notes or, more formally, on prepared forms, a personal data assistant, or a voice recorder (if the latter are permitted in the facility).

E. Document the assessment results (including strengths, deficiencies, and observations).

F. Identify any common factors that contribute to multiple deficiencies.

G. Compare the conclusions against those in the contractor's self-assessments to credit the contractor for self-identified deficiencies and to evaluate the contractor's self-assessment program.

H. Suspend assessment activities if hazards are identified that result in a work stoppage. Assessment activity may continue once mitigating actions are implemented.

I. Use established field observation techniques, including the following:

1. Take detailed notes and records of observed activities, including the objective evidence obtained or reviewed and the date and time of the observed activities.
2. Record the time notes were taken to correlate contractor responses and personnel actions identified by other observers.
3. Include questions, items, and reference information in notes for later follow-up.
4. Compare notes with other observers to share information.

J. Use proven questioning techniques, such as the following:

1. Encourage respondents to answer questions fully without answering for them.
2. State questions so that they require an explanation (e.g., How do you perform. . . and why". When does, Who is responsible for, Where are the…).
3. Limit the use of direct questions (requiring yes or no) to investigating unclear replies or problem areas.
4. Request the respondent provide supporting evidence for answers (e.g., Show me where).

K. Report any incident of contractor uncooperativeness or out-of-the-ordinary observations to the Review Team Leader and the Department of Energy line manager responsible for the facility.

L. Report injuries as follows:

1. Injury to contractor personnel — Review Team Leader, DOE line manager responsible for the facility, and the Facility Representative, if applicable.
2. Injury to an Assessment Team Member — Assessment Team Leader and the Assessment Team Member's supervisor.

M. Independent assessment personnel meet the following criteria:

- Are technically knowledgeable in the areas being assessed.
- Do not have direct responsibilities for the work activity being assessed.
- Act in a management advisory function.
- Have sufficient freedom and authority to identify problems.
- Monitor work performance.
- Identify abnormal performance and precursors of potential problems.
- Focus on improving the quality of the processes that lead to the end product.

- Document assessment results.
- Verify satisfactory resolution of problems.
- Perform follow-up reviews of deficient areas, as necessary or as requested.

OVERVIEW OF REPORT CONTENTS

Executive Summary — This summary is a brief synopsis of what the assessment/investigation was and why it was performed. A more detailed paragraph (or two) in this format is placed under Introduction in the body of the report.

Overall Conclusions and Recommendation — Briefly explain the conclusions of the assessment. Additional detail is provided in the body of the report. If appropriate for the type of assessments, such as an Operational Readiness Review (ORR), provide the team's recommendation regarding the contractor's readiness to begin the activity.

Strengths — In bulleted format, list the Strengths found during the assessment. These are explained in detail within the body of the report.

Deficiencies and Observations — In bulleted format, list the Deficiencies and Observations identified during the assessment. These are explained in detail within the body of the report.

Effectiveness Statement — NQA-1 audits require an effectiveness statement.

Signature Page — Formal assessment reports require a signature page for the Assessment Team Leader and report approving official. Team member signatures are optional.

Body of the Report

Introduction — This section provides the basic background information, such as the assessment purpose, scope, objectives, dates, review team members, and procedures used. Briefly identify the criteria or reference documents on which the assessment was based (e.g., Department of Energy Directive, DOE Rule, contract requirements) or reference the list in an Appendix if it is long. Include a brief description of the activities assessed. This section may be split into additional sections if the material is lengthy.

Assessment Results — This section provides a discussion of the results obtained from data collection and validation. Provide summary paragraphs for each key area of the assessment. For example, the report for an ORR has a summary paragraph for each functional area that was reviewed. The discussion should include examples of specific objective evidence that led the reviewer to the stated conclusion about the subject area. Include subheadings, if appropriate, that are tailored specifically for the assessment. At the end of each summary discussion, list the strengths, deficiencies, and observations that were identified in that area. An alternate method for presenting the information is to provide a discussion of the results and, within this text, include identifiers for the strengths, deficiencies, and observations. Then, provide the list of strengths, deficiencies, and observations in the next section of the report. If a report is too short to have an executive summary, this method of presenting the information puts all of the strengths, deficiencies, and observations in one place, which makes it easier for the reader to locate them.

Lessons Learned — If applicable or if required by the type of review (such as an ORR), provide lessons learned on the assessment process that will help improve the conduct of future assessments.

Appendices — The order and content of some report appendices is often dictated by the type of review (such as an ORR**).** However, for a short, generic report, provide the following appendices: (1) list of interviews (titles only), (2) documents reviewed (document number, title, and issue date), and (3) reference documents (regulations, DOE Directives, DOE Rules, or other documents containing the requirements or expectations relevant to the assessment).

Attached is a sample assessment report (as generated by the EMCBC Pegasus System).

SAMPLE – ASSESSMENT REPORT

U. S. Department of Energy

Environmental Management Consolidated Business Center
250 East Fifth Street, Suite 500
Cincinnati, OH 45202

Assessment Report

Report #: REP-LM-12/10/2007-61598
Date Entered: 12/10/2007
Document Status: Final
Site: EMCBC
Contractor: ABC Remediation

Lead Assessor: Smith, John
Assessment Type: Type 1 Independent Formal
Organization: Office of Logistics Management
Assessment #: AST-LM-12/10/2007-46526

SUBJECT: INTEGRATED SAFETY MANAGEMENT SYSTEM PHASE II VERIFICATION

Executive Summary

This Verification Review was conducted during the period of November 15 – November 30, 2007. The review was organized into three functional areas including: 1) Hazards Identification and Standards Selection, 2) Operations, and Work Planning and Control, and 3) Management….

Overall Conclusions and Recommendation

Two Strengths, two Deficiencies, and two Observations were identified during the review and are detailed in the report.

The ISMS Phase II Verification Team has concluded that ABC Remediation has implemented its ISMS Description as approved by DOE on October 31, 2007. Therefore, it is the recommendation of the team that the DOE Manager approve the ABC Remediation ISMS as described and implemented for ABC operations.

Activities Observed

Over 150 work activities were observed by the Team (see Appendices for Team Member Criteria Review Forms).

Interviews Conducted

Over 300 contractor personnel were interviewed by the Team (see Appendices for Team Member Criteria Review Forms).

Documents Reviewed

Over 700 laboratory documents were reviewed by the Team (see Appendices for Team Member Criteria Review Forms).

Assessment Details

1. Introduction

Following transition, ABC began the consolidation of the activities managed by the two previous contractors into a single set of management systems. In general, this effort was intended to take the best of the different systems and processes of the previous contractors and identify a consistent set of processes for all entities to use. It was determined that, to support the ABC mission, a more aggressive transformation of select management systems was warranted. Fully transformed management systems include work management, quality, project management, and engineering. These new processes were verified to meet DOE ISMS expectations during a Phase I Verification in November 2006. On August 30, 2007, ABC declared it was ready for an ISMS Phase II Verification Review.

2. Purpose

The purpose of the ABC Phase II ISMS Verification assessment was to assess implementation of ABC's ISMS description and provide a recommendation to the DOE Manager regarding the adequacy of ABC's ISMS performance. This report documents the results of that assessment.

3. Scope

The scope of the ABC ISMS Phase II verification included all ABC projects, facilities, and activities managed by ABC under contract DE-AA00-000D00000. Interface agreements with ABC and other contractors and other entities that perform work at ABC were within scope for the Phase II verification....

ISMS core expectations from the ISMS Verification Team Leader's Handbook were included in the ABC Phase II verification.

4. Overall Approach

The Department and Contractors must systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the public, the worker, and the environment. This is to be accomplished through effective integration of safety management into all facets of work planning and execution. In other words, the overall management of safety functions and activities becomes an integral part of mission accomplishment.

5. Results

Strengths

S-1 The Team observed at least three instances of an effective use of stop work…..

S-2 Nuclear Operations Performance Metrics tracking and trending is resulting in targeted assessments in the FY 08 Integrated Assessment Plan. This is a notable example of ……

Deficiencies

D-1 Several procedures were not followed as written as required by ……

D-2 Hoisting and rigging activities during the Cask evolution did not exhibit the expected level of rigor…….

Observations

O-1 A review of JSAs identified an expired JSA as well as inconsistencies in the level of detail for personal protective equipment recommendations.

O-2 Lack of adequate fire protection resources has impacted fire protection program requirements ……

Based on a performance based review that included observing over 150 work activities, interviewing over 300 contractor personnel, reviewing over 700 laboratory documents, and participating in 19 ISMS related presentations, the ABC ISMS Phase II Verification Team has concluded that ABC has implemented all aspects of its ISMS as described in XXX-0000, Integrated Safety Management System, Rev 10, dated August 31, 2007. While there was still evidence of a "lack of maturity" in some areas of implementation the team concluded that the ABC ISMS is well designed and is being implemented in a manner reflective of management commitment and employee involvement.

It is therefore the recommendation of the ABC ISMS Phase II Verification Team that the DOE Manager approve the ABC ISMS as described and implemented for ABC operations.

Lessons Learned

Scheduling of Interviews and Work Observations – In discussion with other Phase II Team members, there is a desire to interview craft personnel and conduct work observations in the earliest stages of the review. While all personnel interviewed provided valuable input and feedback to the review, ISMS implementation at the worker level and observations of more hazardous and/or difficult tasks is the primary focus of a Phase II review.

Scheduling these activities sooner rather than later enables the reviewers the time and ability to track down potential leads and to confirm facts in a timely manner. In discussions with multiple team members, those that interviewed craft personnel early were able to devote the time necessary to fully understanding issues, both positive and negative.

Appendix A – Criteria Review Form 1s (Attachments)
Appendix B – Criteria Review Form 2s (Attachments)
Appendix C – Phase II Review Plan (Attachment)
Appendix D – Supplemental Information (Attachments)

Applicability of MAP Elements

(ISMS Phase II Verification Review)
ISM Core Expectations II-1, II-2, II-3, II-4, II-5, II-6, II-7, II-8

OVERVIEW OF CORRECTIVE ACTION PLAN CONTENTS

List of Corrective Action Detail Tables — Complex CAPs will include Correction Action Detail Tables that describe the actions that will be taken for each finding, the responsible person(s), the due date, the deliverables, etc. This list provides the names of those tables and their page numbers in the Appendix.

List of Acronyms — Self-explanatory.

Executive Summary — The Executive Summary is placed on a separate page after the Table of Contents and List of Acronyms (if included) and before the body of the CAP. This summary is a brief synopsis of what the assessment/investigation was and why it was performed.

Body of the CAP

1.0 Background — Provide a description of the assessment/investigation and its background (why was it performed, who performed it, etc.). Reference Appendix, which should list the deficiencies or Judgments of Need identified in the assessment/investigation.

2.0 Introduction — This is an optional section that may be added at the discretion of the person developing the CAP to add additional information

3.0 Purpose — State the purpose of the CAP. For example, the purpose of the CAP is to document the actions that will be taken to continue to mature and refine the EMCBC/SLA Integrated Safety Management System.

4.0 Corrective Action Plan Development Methodology — Explain the CAP development methodology so that a reader unfamiliar with the assessment will be able to understand how it was prepared. An example is provided below:

The corrective actions were developed for each deficiency and its associated weakness(es) with the intent to continue improving the Integrated Safety Management System. The corrective actions are being tracked in the EMCBC Pegasus System.

5.0 Corrective Action Details — State that specific corrective actions are provided for each deficiency identified in the assessment report.

ROOT CAUSE ANALYSIS GUIDANCE

(1) Every root cause effort should include five phases. While there will be some overlap between phases, efforts should be made to keep them as distinct as possible. These phases include the following:

a. Collect Data: Collect and organize data, develop a problem description and chronology of events, and identify the facts and the effects.
b. Assess: Analyze the "facts" (data) to determine how and why the events happened and assign causal factors.
c. Correct: Develop, review, and implement corrective actions.
d. Inform: Explain/discuss the results of the root cause analysis, including corrective actions, with management and personnel involved in the event, or others as necessary to prevent recurrence of a similar event. In addition, consideration should be given to generating a lessons learned.
e. Follow-up: Perform effectiveness review to determine if corrective action has been effective in resolving problems. Root cause analysis activities can be structured in various ways as long as certain basic elements exist. Effectiveness depends on the ability to identify root causes and prevent repetitive or similar performance problems.

(2) Management should ensure root cause analysis is performed by individuals trained in root cause analysis.

(3) Use a graded approach suited to the significance of the issue.

(4) The recommended Root Cause Analysis Methodology is detailed in DOE G 231.1-2, *Occurrence Reporting Causal Analysis Guide.*

EFFECTIVENESS REVIEW GUIDANCE FOR EMCBC/SLA PERFORMED ASSESSMENTS

(Reference**:** DOE O 414.1C, *Quality Assurance*, Attachment 4)

(1) Corrective Action Effectiveness Reviews evaluate deficiencies and implementation of corrective actions performed to correct the underlying causes for the deficiency. In some instances completed corrective actions have failed to effectively resolve or prevent recurrence of the same or similar assessment deficiencies.

(2) Effectiveness reviews will —

a. Determine whether completed corrective actions have or have not effectively resolved and prevented recurrence of the same or similar deficiencies at the performance level;
b. Identify additional actions necessary to effectively resolve the deficiency and prevent recurrence; and
c. Collect effectiveness data for subsequent analyses and sharing of lessons learned.

(3) Conduct of Effectiveness Reviews.

a. Upon completion of the corrective actions, the responsible manager initiates a follow-up review of the completed corrective actions to verify they are closed, ensure all deficiencies were effectively resolved, and ensure the same or similar deficiencies will not recur. A formal review report as deemed by management is prepared generally within 6 months after the CAP completion date (the date when all corrective actions for all deficiencies listed in the CAP have been completed).
b. The responsible manager determines or approves —
   (1) How the review is conducted,
   (2) Who conducts the review,
   (3) What specific completed corrective actions are reviewed for each deficiency,
   (4) When the review is initiated, and
   (5) How the review report will be formatted.
c. For each deficiency, the responsible manager determines or approves for review a sufficient number of completed corrective actions to allow an objective, accurate assessment of effectiveness in resolving the deficiency and preventing recurrence.
d. Standards for conducting effectiveness reviews include the following:
   (1) A 100 percent review of all corrective actions is not required to determine effectiveness.
   (2) Effectiveness reviews can be initiated at any time during CAP implementation.
   (3) Reviews are initiated based on –
      (a) Severity of a deficiency,
      (b) Length of time needed to review selected corrective actions,
      (c) Availability of resources to review corrective actions, and
      (d) Length of time before all corrective actions for the deficiency are to be completed.

(4) Effectiveness reviews are performed by Federal and/or contractor personnel who are not associated with the deficiencies or corrective actions.
(5) Mechanisms used to conduct effectiveness reviews are determined by the field element manager and may include:

(a) Document reviews,
(b) Performance analyses,
(c) Work observations/facility tours,
(d) Performance testing,
(e) Interviews,
(f) Trending of performance,
(g) Monitoring performance metrics based on operational data,
(h) Tracking performance utilizing targeted assessments, and
(i) Performing tailored scheduled assessments to gather the data.

NOTE: This guidance is adapted for use in EMCBC/SLA performed assessments. Effectiveness reviews for the following HQ reviews must adhere to content and timeframes described in DOE O 414.1C, Attachment 4: HQ Independent Oversight and Emergency Management assessments, Type A accident investigations, deficiencies identified by the Office of Aviation Management, Office of Management, Budget and Evaluation; or other sources as directed by the Secretary or Deputy Secretary, including crosscutting safety issues.

OPERATIONAL AWARENESS ACTIVITIES GUIDANCE

(Reference**:** DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, Attachment 2)

Operational Awareness Activities: DOE line management, primarily through field organizations, must conduct routine day-to-day monitoring of work performance through facility tours/walk-throughs, work observation, document reviews, meeting attendance and participation, and ongoing interaction with contractor workers, support staff, and management.

(1) DOE line management must rigorously review and critique contractor processes and performance in identifying, evaluating, and reporting events and safety issues that are required to be reported by laws, regulations, or DOE directives to determine whether issues are properly screened, evaluated, and reported.

(2) DOE line management must evaluate and monitor the contractor evaluations and corrective actions for events and issues and assesses whether effective recurrence controls are identified and implemented.

(3) Operational awareness activities must be documented either individually or in periodic (e.g., weekly or monthly) summaries.

(4) Deficiencies in programs or performance identified during operational awareness activities must be communicated to the contractor for resolution through a structured issues management process, which can be managed by the DOE field organization or the contractor.

(Reference**:** DOE-STD-1063-2006, *Facility Representatives*)

Facility Representatives: A Facility Representative shall be thoroughly familiar with site and facility characteristics, operating procedures, facility authorization bases, operating organizational structure, and key process control personnel. The Facility Representative shall be aware of major work in progress and in planning. The Facility Representative shall know which personnel are controlling the work, what procedures are to be used, whether training and qualification requirements have been established and are being met. Facility Representatives shall verify that work activities are being performed safely based on periodic observations and spot-check reviews of frequency commensurate with the hazard and difficulty of the work. This knowledge is primarily acquired by walking through the facility, observation of work in progress, review of facility records and documentation, and attendance at appropriate management meetings of the operating contractor. Facility Representatives should spend a significant amount of their time in their assigned facilities observing operations and assessing operating conditions, consistent with the goals in DOE-STD-1063-2006, Appendix A. Field Element Managers shall ensure that operating contractors apprise Facility Representatives of planning, scheduling, maintenance, operations review, and safety review meetings.

DOCUMENT REVIEW GUIDANCE

Scope — This section describes the scope of the review including applicable DOE Orders or other requirements used as a basis for the review.

Summary — This section summarizes the results of the review including any conclusions and recommendations regarding acceptability of the reviewed document and changes needed or recommended.

General Comments — This section lists general comments regarding document format, structure, and overall approach. Minor editorial comments can be listed here, also.

Adherence to Requirements — Technical questions and comments should be discussed in this section.

Attached is a sample document review report for a contractor emergency preparedness plan. Also, DOE G 414.1-2A, Appendix A, provides a Quality Management Review and Approval Template that can be used as a checklist for quality assurance plan reviews. It is recommended that similar checklists be prepared for major requirements documents to be used as a basis for document reviews.

SAMPLE – DOCUMENT REVIEW REPORT

ABC SITE REMEDIATION
EMERGENCY PREPAREDNESS PLAN
REVIEW
12/10/07

Scope

This report documents the results of the ABC Site Remediation Emergency Preparedness Plan per DOE Order 151.1C, *Comprehensive Emergency Management System*. The minimum DOE O 151.1C planning requirements for an Operational Emergency Base Program include the following:

1) Emergency Response Organization
2) Offsite Response Interfaces
3) Emergency Categorization
4) Communications
5) Protective Actions
6) Medical Support
7) Public Information
8) Emergency Facilities and Equipment
9) Program Administration

Summary

This Emergency Preparedness Plan applies to ABC operations an activities identified under DOE Contract No. DE AA09-05XX22222, Task Order No. DE-AA00-00CC00000/SP15. ABC will be performing Surveillance and Maintenance and designated environmental remediation at the XYZ facility. Although this document is well written and meets most of the requirements for an Operational Emergency Base Program, it doe not adequately address all of the requirements of DOE Order 151.1C.

General Comments

Section 1.1, *Scope of the Emergency Preparedness Plan*, refers to DOE Order 151.1B. Task Order No. DE-AA00-00CC00000/SP15 list DOE Order 151.1C in Section J.

Section 7.0, *Evaluations and Readiness Assurance*, refers to Section 2.9.3 which could not be found……

Adherence to Requirements

Section 2.5 of the emergency plan state that ABC emergency responders will determine if an emergency will require offsite response and that offsite response is provided in accordance with existing DOE mutual assistance agreements. **Mutual Assistance Agreements and Letters of Agreement should be part of the emergency plan. If not attached to the document, a list of agreements with the effective dates should be added to this section……..**

PERFORMANCE MEASURES & TREND ANALYSIS GUIDANCE

DOE P 226.1A specifies that performance indicators and measures will be used as one mechanism to help line management identify adverse trends and promote improvements. This data is considered in a variety of management decisions, such as allocating resources, establishing goals, identifying performance trends, identifying potential problems, and applying lessons learned and good practices. Site performance criteria will focus on results and system-based metrics to drive improvements in site programs and management systems at DOE sites.

- Collection of data regarding deficiencies for trending against baseline performance conditions, is a method to identify adverse trends and potential problems.

  DOE G 231.1-1, *Occurrence Reporting and Performance Analysis Guide* and DOE G 231.1-2, *Occurrence Reporting Causal Analysis Guide* provide additional guidance for trending deficiencies.

- Performance measures can be established to support continuous improvement in program, system, or process efficiency and effectiveness. This can include results and system-based metrics.

  DOE G 120.1-5, *Guidelines for Performance Measurement* provides additional guidance.

Further performance measures and trend analysis information and guidance is provided by standard quality management techniques for data collection and analysis, such as, statistical quality control, process flowcharting and graphing, lean and six sigma methodologies, etc.

DEFINITIONS & ACRONYMS

Definitions

Annual Assessment Plan: This plan is a high-level scoping document that identifies the assessment commitments for the upcoming three FYs to ensure all required assessments are performed. The *Annual Assessment Plan* is evaluated at least annually, prior to the start of the FY to ensure that it is up-to-date.

Assessment: An assessment is the act of reviewing, evaluating, inspecting, testing, checking, performing surveillance, auditing, or otherwise determining and documenting whether items, processes, or systems meet specified requirements and are performing effectively. (DOE O 414.1C)

Assessment Category: The categories of assessments performed at the EMCBC/SLA sites are independent assessments and management assessments. Independent assessments include external assessments, oversight assessments, and any other review considered to be "Independent" of the assessed organization or work activity. Management assessments include functional assessments and self-assessments. (DOE O 414.1C)

Assessment Team Leader: An individual who ensures that personnel performing technical assessments possess suitable qualifications commensurate with the nature and type of assessment to be conducted. The Assessment Team Leader also ensures proper execution of the approved assessment plan. Assessments are led by qualified person(s), normally using an assessment plan approved by the responsible manager.

Assessment Type: The types of assessments performed at the EMCBC/SLA sites include but are not limited to program assessments, effectiveness reviews, external reviews, assist visits, for-cause reviews, and management/self-assessments.

Assessment Working Group: A working group composed of representatives from all EMCBC/SLA organizations and chartered by the EMCBC/SLA Assessment Manager to develop the *Annual Assessment Plan* and assist in development of the Integrated Assessment Schedule (IAS).

Corrective Action: A measure taken to rectify and prevent recurrence of conditions that adversely affect quality and mission accomplishments. **(**DOE G 430.1-1, Appendix A)

Deficiencies: Non-compliances with procedural, contractual or regulatory requirements identified during an assessment. They are used to indicate significant inadequacies or safety issues that warrant a high level of attention on the part of management. Deficiencies require resolution by management through a formal corrective action process. Significant deficiencies are deficiencies, if uncorrected, could have a serious effect on environment, safety, health, national security assets, or operational integrity.

DOE Oversight: DOE Oversight encompasses activities performed by DOE organizations to determine whether Federal and contractor programs and management systems, including assurance and oversight systems, are performing effectively and/or complying with DOE requirements. Oversight programs include operational awareness activities, on-site reviews, assessments, self-assessments, performance evaluations, and other activities that involve evaluation of contractor organizations and Federal organizations that manage or operate DOE sites, facilities, or operations.

Effectiveness Review: A follow up evaluation of the completed corrective actions to verify they are closed, ensure all deficiencies were effectively resolved, and ensure the same or similar deficiencies will not recur. Effectiveness reviews are intended to:
1) Determine whether completed corrective actions have or have not effectively resolved and prevented recurrence of the same or similar deficiencies at the performance level;
2) Identify additional actions necessary to effectively resolve the deficiencies and prevent recurrence; and
3) Collect effectiveness data for subsequent analyses and sharing of lessons learned.
(DOE O 414.1C, Attachment 4)

Evidence: Closure documentation that shows that work specified by the action or the issue has been completed and/or has been verified.

Extent of Condition Review: An evaluation to determine if an issue has potential or actual applicability to other activities, processes, equipment, programs, facilities, operations or organizations. The evaluation should focus on the breadth of the problem (e.g. whether it involves a single or multiple facilities) not simply whether the issue exists site-wide.

External Assessment: This type of assessment is performed at the EMCBC/SLA sites and/or its contractors by external entities that have no reporting relationship to EMCBC/SLA sites (e.g., Office of Inspector General, Headquarters (HQ), and the Office of Personnel Management). (DOE O 470.2B)

For-Cause Reviews: These reviews are unscheduled assessments in response to any condition, incident, or trend that poses or may pose an imminent danger to people, property, the environment, or the operational integrity of a facility within the EMCBC/SLA sites or as requested by the EMCBC/SLA Assessment Manager, line management, or other authorized program personnel. The chartering official appoints the Assessment Team Leader, as a minimum, and may appoint the members of the team.

Functional Assessments: These assessments are conducted of the contractor's management/functional systems (e.g., business systems). Management/functional assessments may be performed by the support organization that has cognizance of that service function.

Independent Assessments: These reviews are conducted of EMCBC/SLA line and support organizations and are initiated by the assessing organization or by the EMCBC/SLA Assessment Manager, and they are coordinated with the cognizant EMCBC/SLA organization. Independent assessments are scheduled and conducted to measure item and service quality, to measure the adequacy of work performance, and to promote improvement. Persons performing independent assessments should have sufficient authority and freedom from the line management to carry out their responsibilities. Persons conducting independent assessments should be technically qualified and knowledgeable in the areas assessed. Freedom from the line management organization means that the reviewers are not directly responsible for the work activity being assessed.

Through defined assessment methodologies and techniques, which include the review and evaluation of organization-specific management assessments, independent assessments ensure that the following goals are achieved by performing independent assessments:

- Problems preventing EMCBC/SLA sites from meeting its established goals, including potential or fundamental causes, are identified.
- Actions are taken to correct identified problems.
- Actions to prevent recurrence are identified and documented.

Independent Oversight: Independent oversight is the objective evaluation of the Department's performance without being subject to or influenced by the Department's policy or line management organizations. Within DOE, the sole responsibility for independent oversight resides with the Office of Independent Oversight and Performance Assurance, reporting directly to the Office of the Secretary of Energy. (DOE O 470.2B)

Independent Oversight and Performance Assurance Appraisals: The HQ Office of Independent Oversight and Performance Assurance has the responsibility for independent oversight within DOE reporting directly to the Secretary. Appraisals (e.g., inspections, safety management evaluations, special reviews, special studies, and follow-up reviews) are used to evaluate the status of safeguards and security; cyber security; emergency management; and environment, safety, and health at DOE-owned or DOE-leased sites or facilities or for DOE operations or organizations. (DOE O 470.2B)

Integrated Assessment Schedule: An annual schedule used by EMCBC/SLA management to gain an overview of EMCBC/SLA assessment activity. The *Integrated Assessment Schedule* flows from the *Annual Assessment Plan,* is the detailed list of upcoming assessments for the fiscal year, and provides more detail than the plan (i.e., the organization owning the assessment, subject, assessment type, assessment category, team lead, driver, and review dates). It is comprised of those assessments that meet the criteria established by senior management and assist in compliance with Criteria 9 and 10 of DOE O 414.1C.

Management Assessments: These assessments encompass those activities by which EMCBC/SLA organizations collect and evaluate information on their own performance, as well as the performance of their contractors. These assessments are used to assess the management processes and to identify and correct problems that hinder the organization from achieving its objectives. These assessments focus on identifying management problems that prevent effective implementation of ES&H and quality requirements. This process not only assists EMCBC/SLA sites in achieving its objectives but also allows EMCBC/SLA sites to evaluate customer and employee perceptions relative to the following key issues:

- The organization's mission and strategic objectives.
- The employees' role in the organization.
- Customers' expectations and the degree to which those expectations are being met.
- Opportunities for improving quality and cost-effectiveness.
- Recognizing and enhancing human resources capabilities.

Observation: A problem or condition that is of concern to Line Management but does not meet the definition of a deficiency.

Operational Awareness: Activities performed by line management by conducting routine day-to-day monitoring of work performance through facility tours/walkthroughs, work observation, document reviews, meeting attendance and participation, and ongoing interaction with contractor workers, support staff, and management. Walkthroughs, as well as any follow-up, should be documented. (DOE O 226.1A)

Oversight: Activities performed by DOE organizations to determine whether Federal and contractor programs and management systems, including assurance and oversight systems are performing effectively and/or complying with DOE requirements. Oversight programs include operational awareness activities, onsite reviews, assessments, self-assessments, performance evaluations, and other activities that involve evaluation of contractor organizations and Federal organizations that manage or operate DOE sites, facilities, or operations. (DOE O 226.1A)

Performance Indicators: Data that is collected to help line management identify adverse trends and promote improvements. **(**DOE P 226.1A)

Root Cause: The causal factor(s) that, if corrected, would prevent recurrence of the accident.

Root Cause Analysis: Any methodology that identifies the causal factors that, if corrected, would prevent recurrence of the accident (DOE G 225.1A-1). Root cause analysis is any method used to identify the root cause(s) of performance problems or adverse trends and associated corrective action. Refer to Attachment E of this procedure for guidance on performing root cause analysis.

Self-Assessment: These reviews are conducted by an organization of itself to ensure effective implementation of requirements. (DOE O 226.1A)

Strength: A performance item that exhibits a level of performance deemed worthy of communicating to other EMCBC/SLA organizations since it is innovative or may be indicative of the highest level of excellence. Use of these terms is discouraged unless the item is also identified as a strength in the assessment report. In Pegasus, the status of a strength defaults to Closed.

Verification of Action Closure: Issues management should include ensuring that corrective actions are complete. (DOE O 226.1A, Contractor Requirements Document)

Verification of Effectiveness: Issues management should include "ensuring that corrective actions are effectively implemented and accomplish their intended purposes, using a graded approach based on risk." (DOE O 226.1A, Contractor Requirements Document)

Walkthrough: The act of physically observing a contractor area/facility or activity or facility to verify that safe working conditions exist and applicable requirements are being followed during work implementation. (Assessment Improvement Group and Safety Advocates)

Walkthrough Surveillance Program: Periodic inspection visits or tours by management and senior staff of facilities and operations. (DOE O 226.1A)

Acronyms

CAP	Corrective Action Plan
CATS	Corrective Action Tracking System
DOE	Department of Energy
EM	Office of Environmental Management
EMCBC	Environmental Management Consolidated Business Center
ES&H	Environment, Safety and Health
FEOSH	Federal Employee Occupational Safety and Health Program
FRAM	Functions, Responsibilities, and Authorities Manual
FY	Fiscal Year
HQ	Department of Energy Headquarters
HSS	Office of Health, Safety and Security
IAS	Integrated Assessment Schedule
MORT	Management Oversight and Risk Tree
ORR	Operational Readiness Review
POC	Point-of-Contact
QA	Quality Assurance
SLA	Service Level Agreement
SME	Subject Matter Expert

EMCBC RECORD OF REVISION

DOCUMENT

If there are changes to the controlled document, the revision number increases by one. Indicate changes by one of the following:

- Placing a vertical black line in the margin adjacent to sentence or paragraph that was revised.
- Placing the words GENERAL REVISION at the beginning of the text.

Rev. No.	Description of Changes	Revision on Pages	Date
1	Initial Procedure	All	12/13/07